## In the Claims

The status of claims in the case is as follows:

1 1. [Currently amended] A collaboration space, comprising:

 $\mathcal{J}^{3}$ 

a place comprising a plurality of rooms linked by

forward and reverse pointers, each said forward pointer

including a readers field;

- a member directory for said place identifying users
  authorized to enter said place; and
- each said room comprising one or more pages, and for

  each said room <u>said readers field being</u> a members

  object for identifying members authorized to access

  said room and for each member a level of authorization.
  - 1 2. [Original] The collaboration space of claim 1, said
  - levels of authorization including manager, author, and
  - 3 reader.

- 1 3. [Currently amended] The collaboration space of claim 1,
- 2 A collaboration space, comprising:
- a place comprising a plurality of rooms linked by
  pointers;

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a member directory for said place identifying users authorized to enter said place; and

- each said room comprising one or more pages, and for

  each said room a members object for identifying members

  authorized to access said room and for each member a

  level of authorization;
- said rooms including a parent room and a child room, and
  said pointers comprising forward and backward pointers for
  enabling the security of each said room to be independently
  managed.
  - 4. [Original] The collaboration space of claim 3, each
     said forward pointer further comprising a readers field,
     said readers field including an access authority for each
  - 4 reader authorized to enter said room.

- 1 5. [Original] The collaboration space of claim 3, each
- 2 said forward pointer being secure pointer.
- 1 6. [Original] The collaboration space of claim 5, each 2 said forward pointer carrying the same security as that of
- 2 Sala lorward pointer earlying the same security as that or
- 3 the subroom to which it points.
- 7. [Original] The collaboration space of claim 6, further
- 2 comprising a display for presenting to a specific user
- 3 viewing a parent room a listing of its subrooms, said
- 4 listing including for said specific user only those subrooms
- 5 for which a readers field in said forward pointer includes
- 6 an entry authorizing access by said specific user.
- 8. [Currently amended] A database access control system,
- 2 comprising:
- 3 an access control list for specifying users who can or
- 4 cannot access said database;

5	for users authorized to access said database, said
6	access control list further specifying access levels
7	and roles determining the specific actions said users
8	are authorized to perform, said roles including reader,
9	author, and manager;
to	a form selectively including a form access list;
11	said database including one or more documents created
12	from said form;
13	forward pointers linking said form to said documents
L 4	and reverse pointers linking said documents back to
15	<pre>said form;</pre>
16	said form access list identifying users authorized to
L7	read documents created from said form;
18	each said <u>forward pointer to a</u> document including a
19	document access field selectively including a readers
20	field and an authors field for controlling who can read
21	or modify said document; users identified in any said
	of modify said document, dsels identified in any said

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was created being included in said readers field;

form access list for said form from which said document

24	entries in said readers field granting authorization to
25	an individual user equal to or less than the
26	authorization for said individual user in said access
27	control list; and
28	entries in said authors field selectively granting
29	authorization to a user authorized as an author in said
30	access control list to edit a document which said
31	author creates.

- 9. [Currently amended] A method for controlling access to rooms within a collaboration place, comprising the steps of:
- maintaining for said collaboration place an access control list identifying those users authorized to

enter said place;

- providing <u>forward and reverse</u> pointers linking said

  rooms <u>in a hierarchical structure</u> within said place,

  said <del>pointers including</del> forward pointers having a

  readers field;
- displaying a parent room to a specific user, said

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parent room including a list of children rooms for
which said readers fields on said forward pointers
authorize said specific user access.

 $\left( \mathcal{J}_{2}^{3}\right)$ 

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10. [Original] A method for creating a child room within a collaboration place data base, comprising the steps of:

providing for said data base an access control list identifying users authorized to access said data base;

providing for said child room a back pointer to a parent room; and

providing at said parent room for said child room a forward pointer from said parent room, said pointer including a readers access field listing users authorized to access said child room.

- 11. [Original] The method of claim 10, further comprising the steps of:
- 3 limiting reader access in said readers access field to

said child room for a specific user to no more than the access granted said specific user in said access control list.



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12. [Original] The method of claim 11, further comprising the step of initially including in said readers access field for a child room created from a form users identified in a form access list identifying users authorized to read rooms created from said form.

- 1 13. [Currently amended] A program storage device readable
- 2 by a machine, tangibly embodying a program of instructions
- 3 executable by a machine to perform method steps for
- 4 controlling access to rooms within a collaboration place,
- 5 said method steps comprising:
- maintaining for said collaboration place an access
  control list identifying those users authorized to
  enter said place;
- 9 providing <u>forward and reverse</u> pointers linking said
  10 rooms within said place, said <del>pointers including</del>

11		forward pointers having a readers field; and
12		displaying a parent room to a specific user, said
13		parent room including a list of children rooms for
14		which said readers fields on said forward pointers
15		authorize said specific user access.
1	14.	[Currently amended] An article of manufacture
2	comp	rising:
3		a computer useable medium having computer readable
4		program code means embodied therein for controlling
5		access to rooms within a collaboration place, the
6		computer readable program means in said article of
7		manufacture comprising:
8		computer readable program code means for causing a
9		computer to effect maintaining for said collaboration
10		place an access control list identifying those users
11		authorized to enter said place;
12		computer readable program code means for causing a
13		computer to effect providing forward and reverse

14	pointers linking said rooms in a hierarchical structure
15	within said place, said pointers including forward
16	pointers having a readers field; and
17	computer readable program code means for causing a
18	computer to effect displaying a parent room to a
319	specific user, said parent room including a list of
L 20	children rooms for which said readers fields on said
21	forward pointers authorize said specific user access.
1	15. [Currently amended] A computer program product or
2	computer program element for controlling access to rooms
3	within a collaboration place according to the steps of:
4	maintaining for said collaboration place an access
5	control list identifying those users authorized to
6	enter said place;
7	providing forward and reverse pointers linking said
8	rooms in a double-linked list within said place, said

field;

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pointers including forward pointers having a readers

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11	displaying a parent room to a specific user, said
12	parent room including on said forward pointers a list
13	of children rooms for which said readers fields
14	authorize said specific user access.